

## CLAIMS

I Claim:

5        1.     A lighting system for illuminating a large outdoor playing field, comprising:

          a playing field;

          a plurality of full cutoff illumination assemblies placed in predetermined locations about the playing field, each illumination assembly comprising a  
10       support and a full cutoff luminary coupled to the support;

          each full cutoff luminary comprising

          a lamp housing that encloses a lamp, the lamp housing having an open end,

          a lamp lens mounted upon the open end of the lamp housing,

15       a reflector disposed between the lap and the lamp housing, and  
          a light-blocking shield coupled about the open end of the lamp housing;

          wherein each full cutoff luminary achieves full cutoff, zero candela intensity at an angle of ninety degrees above nadir; and

20       wherein each full cutoff luminary is coupled to a support such that the plurality of illumination assemblies, when placed in the predetermined locations, also achieves full cutoff.

25       2.     The lighting system of claim 1 wherein the outdoor playing field comprises a football field.

3       3       The lighting system of claim 1 wherein the illumination assemblies comprise a plurality of luminaries.

4. The lighting system of claim 1 wherein a first luminary is mounted behind a second luminary as a single luminary assembly.

5. The lighting system of claim 1 wherein each luminary is mounted at a height of at least 40 feet.

6. A method of reducing light pollution in an outdoor environment and for facilitating compliance with local lighting ordinances, comprising:

removing all non-full cutoff luminaries that once lit a playing field from the playing field; and then

5 mounting at least one full cutoff luminary about the playing field, the full cutoff luminary comprising

a lamp housing that encloses a lamp, the lamp housing having an open end,

10 a lamp lens mounted upon the open end of the lamp housing,  
a reflector disposed between the lap and the lamp housing, and  
a light-blocking shield coupled about the open end of the lamp housing.

15 7. The method of claim 6 further comprising turning on a full cutoff luminary.

20 8. The method of claim 6 further comprising the act of automatically registering with a local government to show compliance with a local light ordinance via a computing machine.

25 9. The method of claim 8 further comprising the act of automatically canvassing a local community to educate the residents that that installation of full cutoff lighting will dramatically reduce spill light.

10. An illumination assembly for illuminating a large outdoor playing field with zero candela intensity at an angle of ninety degrees above nadir, comprising:

a support-receiving portion;

a full cutoff luminary coupled to the support;

the full cutoff luminary comprising

a lamp housing that encloses a lamp, the lamp housing having an open end,

a lamp lens mounted upon the open end of the lamp housing,

a reflector disposed between the lap and the lamp housing, and

a light-blocking shield coupled about the open end of the lamp housing; and

wherein each full cutoff luminary is coupled to the support in a way that the illumination assembly itself achieves full cutoff.

12. The illumination assembly of claim 14 wherein the luminary comprises a lamp having a main candle power distribution in about the sixty-degree plane.

13. The illumination assembly of claim 15 wherein the luminary does not emit light above the eighty-five degree plane.

14. The illumination assembly of claim 15 wherein the luminary maintains a main beam intensity in the sixty-degree plane.

15. The illumination assembly of claim 15 wherein the luminary is coupled to the support at an angle above the horizontal plane.

16. The illumination assembly of claim 14 further comprising a second luminary coupled to the support.

17. The illumination assembly of claim 10 wherein the illumination assembly comprises a plurality of luminaries.